

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Aurora Bearing Co.

Chicago Manufacturing Center

Aurora Bearing Captures Value Via Supplier Development Initiative

Client Profile:

Aurora Bearing Company is a world leader in the manufacture of rod end and spherical bearings. Founded in 1971, the company quickly made its mark in the industry by commercializing a design for a two-piece, all steel rod that is now a standard in the U.S. market. Today, the company has a broad range of products and markets, serving the aerospace, military, automotive, marine and packaging industries. Headquartered in Aurora, Illinois the company is preparing to consolidate its operations at a 206,000 square-foot facility in Montgomery, Illinois. Aurora Bearing employs 250 people.

Situation:

Aurora Bearing was one of a select group of suppliers to Oshkosh Truck invited to participate in a supplier development initiative offered through the Wisconsin Manufacturing Extension Partnership (WMEP) and Chicago Manufacturing Center (CMC), NIST MEP network affiliates. Developed by WMEP, the program uses Manufacturing Critical-Path Time (MCT) and lean manufacturing techniques to identify and address areas of improvement. Oshkosh Truck is a founding OEM participant in the program. Measuring the state of "leanness" in their suppliers was a key indicator for Oshkosh Truck. For Aurora Bearing, that meant finding ways to reduce inventory, costs and lead time in fulfilling orders for Oshkosh Truck. The company supplies seven part numbers to Oshkosh Truck, making them a valuable customer.

Solution:

CMC conducted a Value Stream Mapping/Manufacturing Critical Path-time (VSM/MCP) assessment at Aurora Bearing. Over the course of two days, Tom Jarapko, CMC's Lean Practice Leader, worked with a 10-member Aurora Bearing team to define the Current State and the desired Future State VSM and MCP. Drawing from front-office function as well as manufacturing, the multidisciplinary team identified ways to streamline order fulfillment for Oshkosh, such as reducing the number of process steps, shortening travel distances, eliminating inspection steps by training operators to do the inspections, and reducing queue time through same-day schedule updates. "A key insight, said Ward, "was learning the importance of focusing on the customer's consumption rate. We had been overproducing, which is not only costly, but can also interfere with meeting other customer commitments. Now, we're looking at what our customer needs on a weekly basis. The need to expand our cellular manufacturing process became important to the process." At the end of the two-day engagement, Aurora Bearing had created a one-year Value Stream Plan with measurable goals and milestones.

Results:

* Reduced lead time by 76 percent.

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

- * Reduced critical-path time by 51 percent.
- * Reduced raw inventory by 68 percent.
- * Reduced work in process by 57 percent.

Testimonial:

"Although Aurora Bearing employees have had a lot of exposure to Lean, the Manufacturing Critical Path-time approach was new to us. We are better prepared to balance the production flow and deal with fluctuations in customer needs. The Chicago Manufacturing Center team did a great job. We found the experience very rewarding."

Jerry Ward, Plant Manager